

#### US006459887B2

# (12) United States Patent Okuda

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| (54) | FOLDABLE PORTABLE TELEPHONE |                                |  |  |  |
|------|-----------------------------|--------------------------------|--|--|--|
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### (57) ABSTRACT

A foldable portable telephone of the invention comprises a main body case 1, and a closure case 2 connected to the case 1 by a pair of hinge mechanisms 10, 10'. On the hinge mechanisms, 10, comprises cylindrical barrel portions 13, 22 provided respectively on the main body case 1 and the closure case 2, and a hinge assembly 4 inserted through the barrel portions. The hinge assembly 4 comprises a main body drive member in engagement with the barrel portion 13 on the main body case 1 nonrotatably relative thereto, a closure drive member in engagement with the barrel portion 22 on the closure case 2 nonrotatably relative thereto, a prime mover spring for rotating the closure drive member in a direction to open the closure case 2, a holding mechanism for holding the closure case 2 in a closed position, a manual button 41 to be manipulated to open the closure case 2, and a hold release mechanism for releasing the holding mechanism from the holding state in response to the manipulation of the manual button. The closure case can be opened easily at the touch of the manual button even when the closure case has a relatively great weight.

### 17 Claims, 15 Drawing Sheets

